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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/530,465	HUI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anh-Vu H Ly	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed July 15, 2004.
2. ☒ The allowed claim(s) is/are 1, 3-13, 15-25 renumbered as 1-23.
3. ☒ The drawings filed on 28 April 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with E. Russell Tarleton on October 27, 2004.

The application has been amended as follows:

#### ***Abstract***

Replace the abstract of the disclosure with the attached abstract.

#### ***In The Claims***

1. (Currently Amended) An apparatus for depacketizing and aligning input data having a packetized format, comprising:

an input memory for receiving, storing, and output of input data, and for outputting of units of a payload of a data packet of the input data;

a data input interface through which the input data is transferred to the input memory, said input data interface configured to perform hand shaking with a packetized data source of said input data;

data processing means for receiving the outputted input data from the input memory and detecting, identifying and determining payload size of the data packet and generating a payload size signal indicative of the size of the payload, and for separately receiving and effecting data processing of the payload;

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a word formatter for receiving said units of said payload outputted from the input memory, gathering and aligning said units to form data words, and for outputting said data words;

a payload counter for controlling the input memory in accordance with the payload size signal and configured to cause the payload units to be outputted from the input memory to the word formatter; and

an input buffer for receiving said data words from the word formatter and storing them, and for transferring the data words to the data processing means, to effect separate receiving of said payloads; and processing using the received said data words.

***Allowable Subject Matter***

2. Claims 1, 3-13, and 15-25 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest that the data processing means is used only for determining the size of the payload and generating the size signal and then for subsequent processing of the formatted words retrieved from the packetized input data, as specified in independent claims 1, 13, 24, and 25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Chopping (US Patent No. 6,442,163 B1) discloses depacketizer and a frame aligner including the depacketizer.

Settle et al (US Patent No. 6,233,253 B1) discloses system for digital data format conversion and bit stream generation.


Gaytan et al (US Patent No. 5,638,367) discloses apparatus and method for data packing through addition.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh-Vu H Ly whose telephone number is 571-272-3175. The examiner can normally be reached on Monday-Friday 7:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avl

  
CHI PHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2667 10/28/07

### Abstract

Apparatus for depacketizing and aligning packetized input data. Data processing means receives the input data via an input memory and detects, identifies, and determines payload size of a data packet of the input data. The data processing means generates a payload size signal indicative of the size of the payload. A word formatter receives units of the payload from the input memory and gathers and aligns these to form data words. A payload counter controls flow of input data from the input memory to the word formatter in accordance with the payload size signal. An input buffer receives the data words from the word formatter, stores these and transfers them to the data processing means for effecting data processing.